PATENT COOPERATION TREATY

CORRECTED VERSION

PCT

INTERNATIONAL SEARCH REPORT (PCT Article 18 and Rules 43 and 44)

App PYX	licant's	s or age T-1	nt's file reference	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
Inter PC	mation Γ/CA2	al appli 2004/00	ication No.)1507	International filing date (day/month/year) 26 July 2004 (26-07-2004)	(Earliest) Priority date (day/month/year) 01 August 2003 (01-08-2003)	
	licant ERSO	n peri	RY			
This copy	interna is being	tional sea 3 transmi	arch report has been prepitted to the International	pared by this International Searching Authority and is tra Bureau.	insmitted to the applicant according to Article 18. A	
This	interna	tional sca	arch report consists of a	total of 5 sheets.		
		[X]	It is also accompanied	by a copy of each prior art document cited in this report		
1.	1. Basis of the report					
	a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it w filed, unless otherwise indicated under this item.					
			the internation	nal search was carried out on the basis of a translation of ule 23.1(b)).	the international application furnished to this	
	b.	[]	With regard to any nu	cleotide and/or amino acid sequence disclosed in the	international application, see Box No. I.	
2.		[]	Certain claims were	found unsearchable (See Box II).		
3.		[]	Unity of invention is	lacking (See Box III).		
`4.	With	regard to	the title.			
		[X]	the text is approved as	submitted by the applicant.		
		n	the text has been estab	olished by this Authority to read as follows:		
					•	
5.	With	regard to	o the abstract.			
		[X]	the text is approved as	s submitted by the applicant.		
		[]	the text has been estal month from the date of	olished, according to Rule 38.2(b), by this Authority as in finalling of this international search report, submit com	t appears in Box IV. The applicant may, within one ments to this Authority.	
6.	With	regard to	o the drawings,			
a.		The fig	gure of the drawings to	be published with the abstract is Figure No. 12		
			[X] as suggested	by the applicant.		
			[] As selected b	by this authority, because the applicant failed to suggest	a figure.	
			[] As selected t	by this Authority, because this figure better characterizes	the invention.	
	b.	[]	None of the figures is	to be published with the abstract.		

Form PCT/ISA/210 (first sheet) (January 2004)

International application No. PCT/CA2004/001507

Box	No. I	[Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)		
1.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:					
	a.	type of material				
		[]		a sequence listing		
		[]		table(s) related to the sequence listing		
	b.	for	mat	of material		
		[]	1	in written format		
		[]]	in computer readable form		
	c.	tir	ne o	ne of filing/furnishing		
		[]	contained in the international application as filed		
		1]	filed together with the international application in computer readable form		
		[]	furnished subsequently to this Authority for the purposes of search		
2	[]			ition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been or furnished, the required statements that the information in the subsequent or additional copies is identical to that application as filed or does not go beyond the application as filed, as appropriate, were furnished.		
3.	Add	litiona	ıl co	mments:		
۱.		٠				
				·		
				·		

Form PCT/ISA/210 (continuation of first sheet (1) (January 2004)

International application No. PCT/CA2004/001507

Box	No. II	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)				
	This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:					
1		Claims Nos.: because they relate to subject matter not required to be searched by this Authority; namely:				
2 .	[]	Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:				
3	[]	Claims Nos.: because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule				
Во	x III	Observation where unity of invention is lacking (Continuation of item 3 of first sheet)				
Thi	s Interna	ational Searching Authority found multiple inventions in this international application, as follows:				
1	[]	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.				
2	[]	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.				
3	[]	As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:				
4	[]	No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims, it is covered by claims Nos. :				
Re	mark o	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.				

Internation No. PCT/CA2004/001507

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G06T-9/00 G06F-12/00

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC^7 G06T-9/00 G06T-12/00 USPC: 345/423

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)
USPTO WEST, Canadian Patent Database, IEEE Explore, QWEB (Pluspat, Inspec), Delphion. Search terms: centroid, voronoi, cell

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
х	Kevin Sahr et al., "Geodesic Discrete Global Grid Systems", Cartography and Geographic Information Science, Vol. 30, No. 2, April 2003, pp. 121-134 http://www.fs.fed.us/pnw/wenlab/pdf/gdggs03.pdf	1 - 5, 7 - 11, 14 - 21
	p. 121 left cololumn, first paragraph; p. 122, left col. 2 nd paragraph; p. 127-128 and Fig. 7	
P,Y	Hipparchus Tutorial and Programmer's Guide, Internet Edition (corresponding to Hipparchus Release 3.4), last updated 2004/02/27, by Ron Gilmore, Vice President and John Russel, President, Geodyssey Limited, Calgary (Alberta), Canada, copyright Geodyssey Limited, 1993-2004. http://www.geodyssey.com/tutorial/tc00.html	14 - 21
	Chapter 6: Working With Voronoi Cells	
Α	US-6,384,826 (Bern et al.), May 7, 2002 entire document	1 - 13
		,

Further documents are listed in the continuation of Box C.		Patent family members are listed in annex.	
* "A" "E" "L" "O" "P"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the international filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family	
Date of the actual completion of the international-type search 15 November 2004 (15-11-2004)		Date of mailing of the international-type search report 17 December 2004 (17-12-2004)	
	te and mailing address of the ISA/CA Commissioner of Patents Canadian Patent Office - PCT Ottawa/Gatineau K1A 0C9 imile No. 1-819-953-9358	Authorized officer Serge Carrier (819) 997-2322	

Information on patent family members

International application No. PCT/CA2004/001507

Patent Document Cited in Search Report Publication Date Patent Family Member(s) Publication Date

US6384826

07-05-2002

EP0981108 A2 JP2000076485 A 23-02-2000 14-03-2000